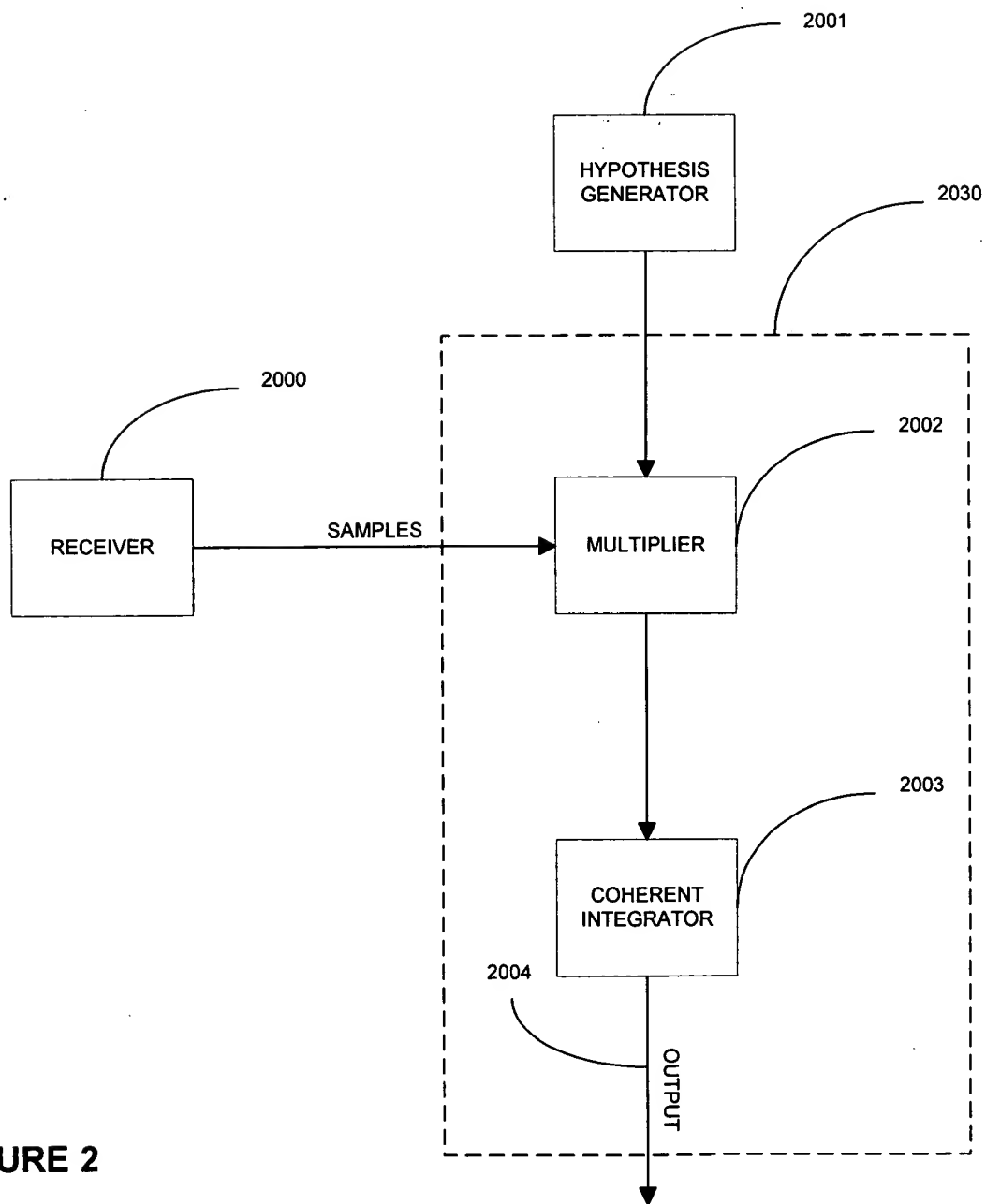


FIGURE 1



```
graph TD; BEGIN([BEGIN]) --> 10[RECEIVE SEGMENT OF SAMPLES]; 10 --> 11[GENERATE HYPOTHESES]; 11 --> 12[SELECT HYPOTHESIS]; 12 --> 13[FORM PRODUCT BETWEEN SAMPLES AND HYPOTHESIS]; 13 --> 14[COHERENTLY INTEGRATE PRODUCT OVER DESIRED DURATION]; 14 --> 15[DERIVE AND SAVE CORRELATION VALUE FOR HYPOTHESIS]; 15 --> 16{MORE HYPOTHESES?}; 16 -- No --> END([END]);
```

The flowchart illustrates a process for forming a product between samples and hypothesis. It begins with a start node labeled "BEGIN". The process then proceeds through a series of steps: "RECEIVE SEGMENT OF SAMPLES" (labeled 10), "GENERATE HYPOTHESES" (labeled 11), "SELECT HYPOTHESIS" (labeled 12), "FORM PRODUCT BETWEEN SAMPLES AND HYPOTHESIS" (labeled 13), "COHERENTLY INTEGRATE PRODUCT OVER DESIRED DURATION" (labeled 14), and "DERIVE AND SAVE CORRELATION VALUE FOR HYPOTHESIS" (labeled 15). The process then enters a decision loop labeled 16, "MORE HYPOTHESES?". If the answer is "No", the process ends at the "END" node.

### FIGURE 3

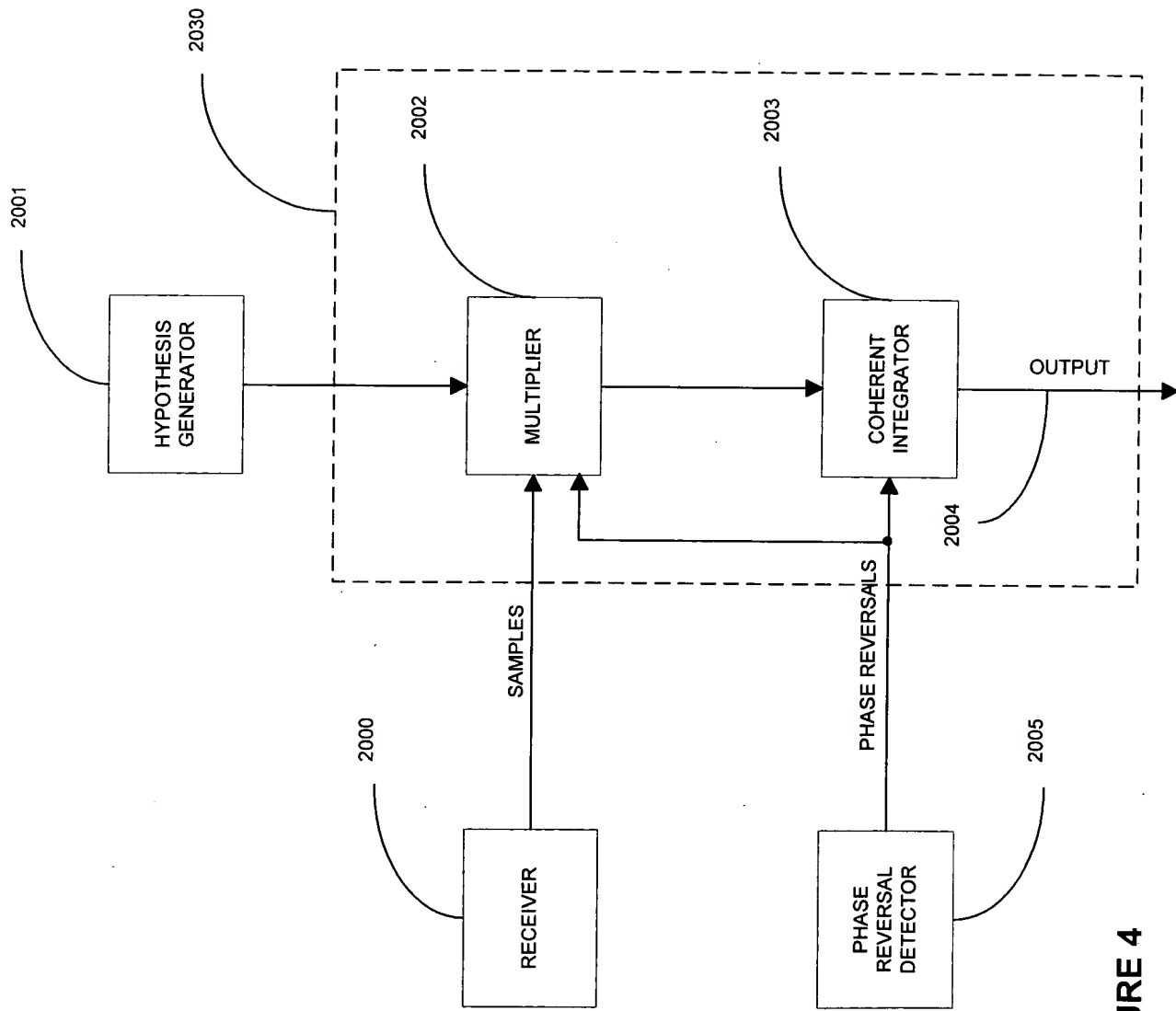


FIGURE 4

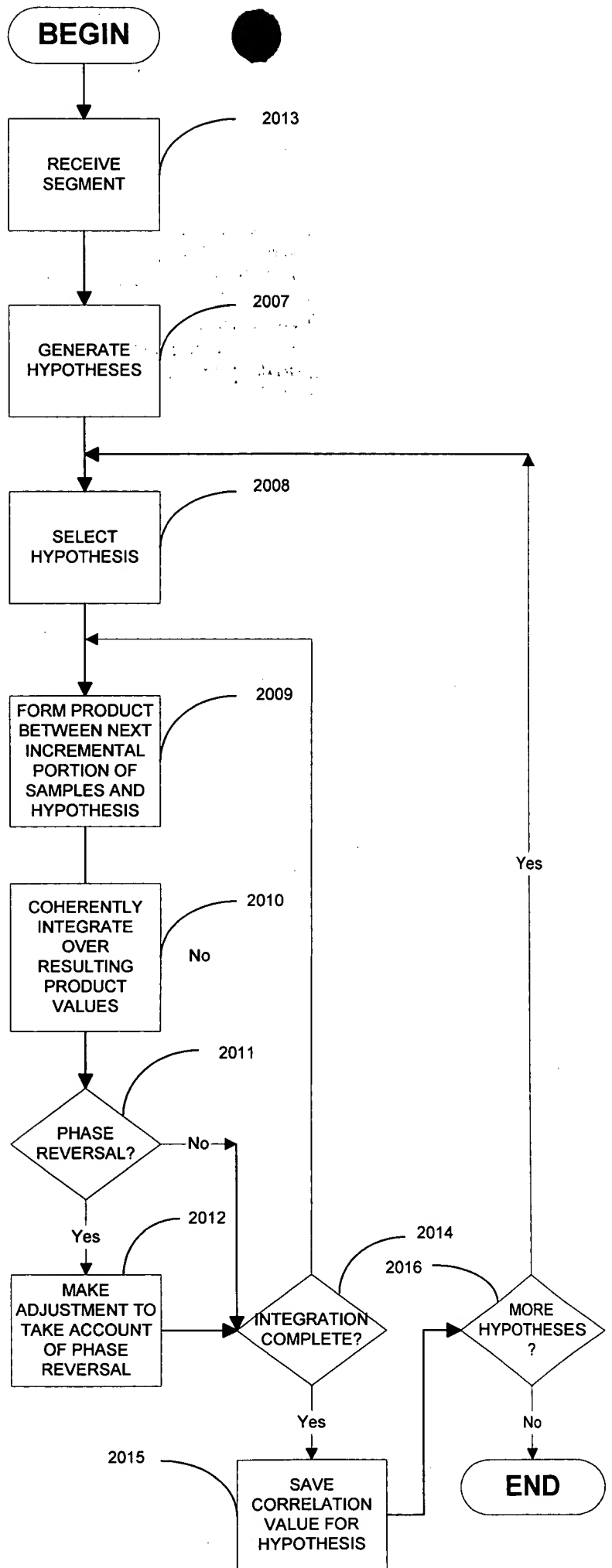


FIGURE 5

66060-9578260

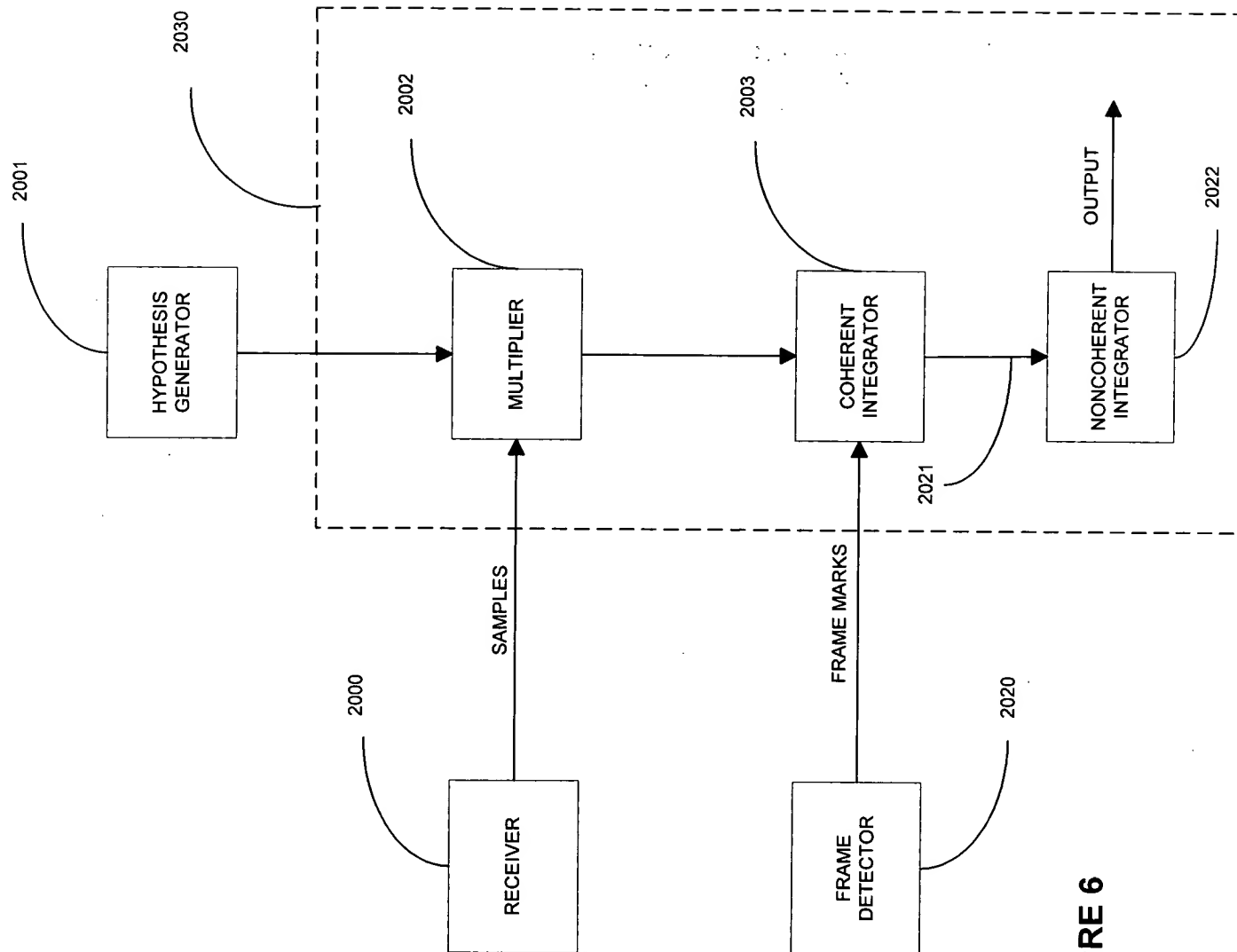


FIGURE 6

0928156 03300

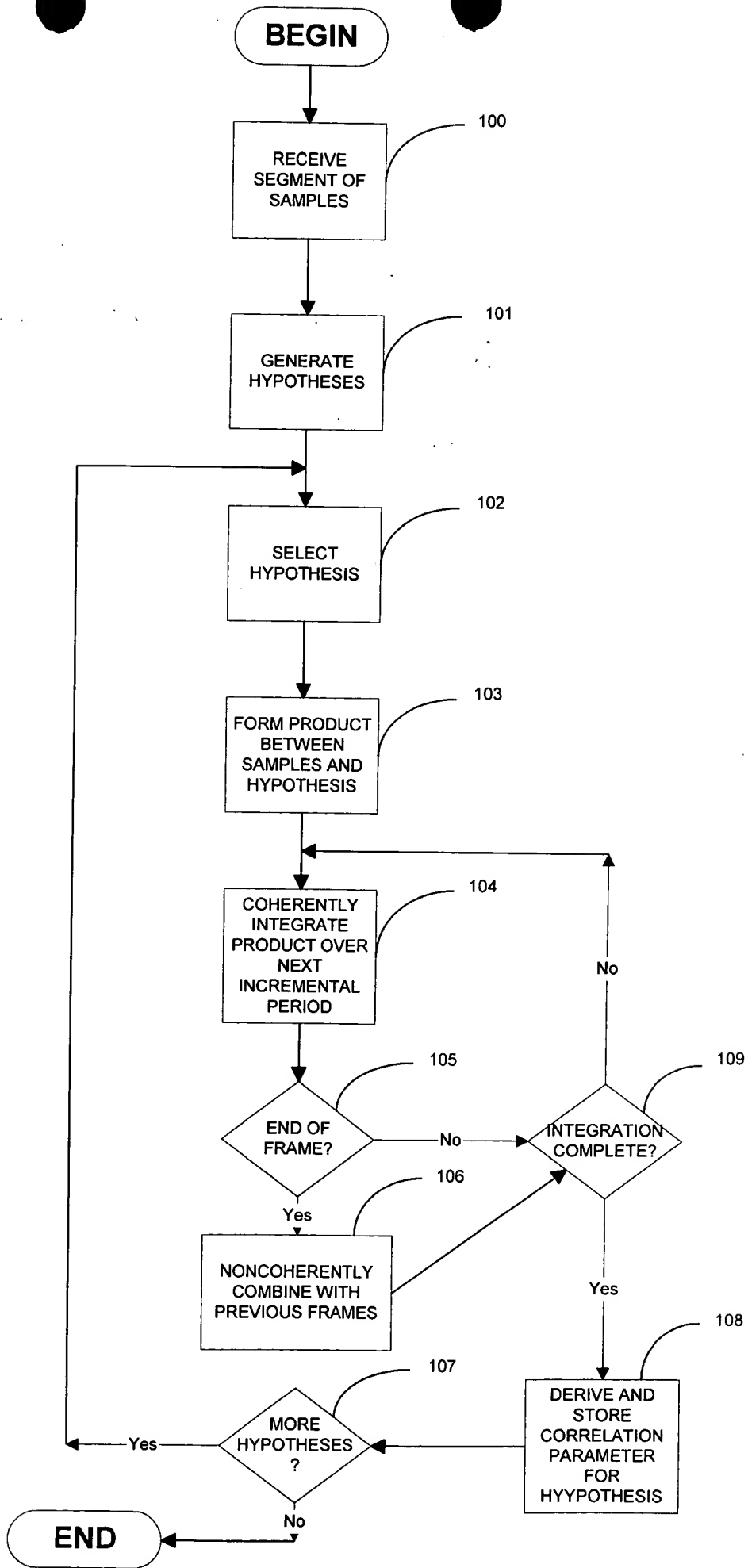


FIGURE 7





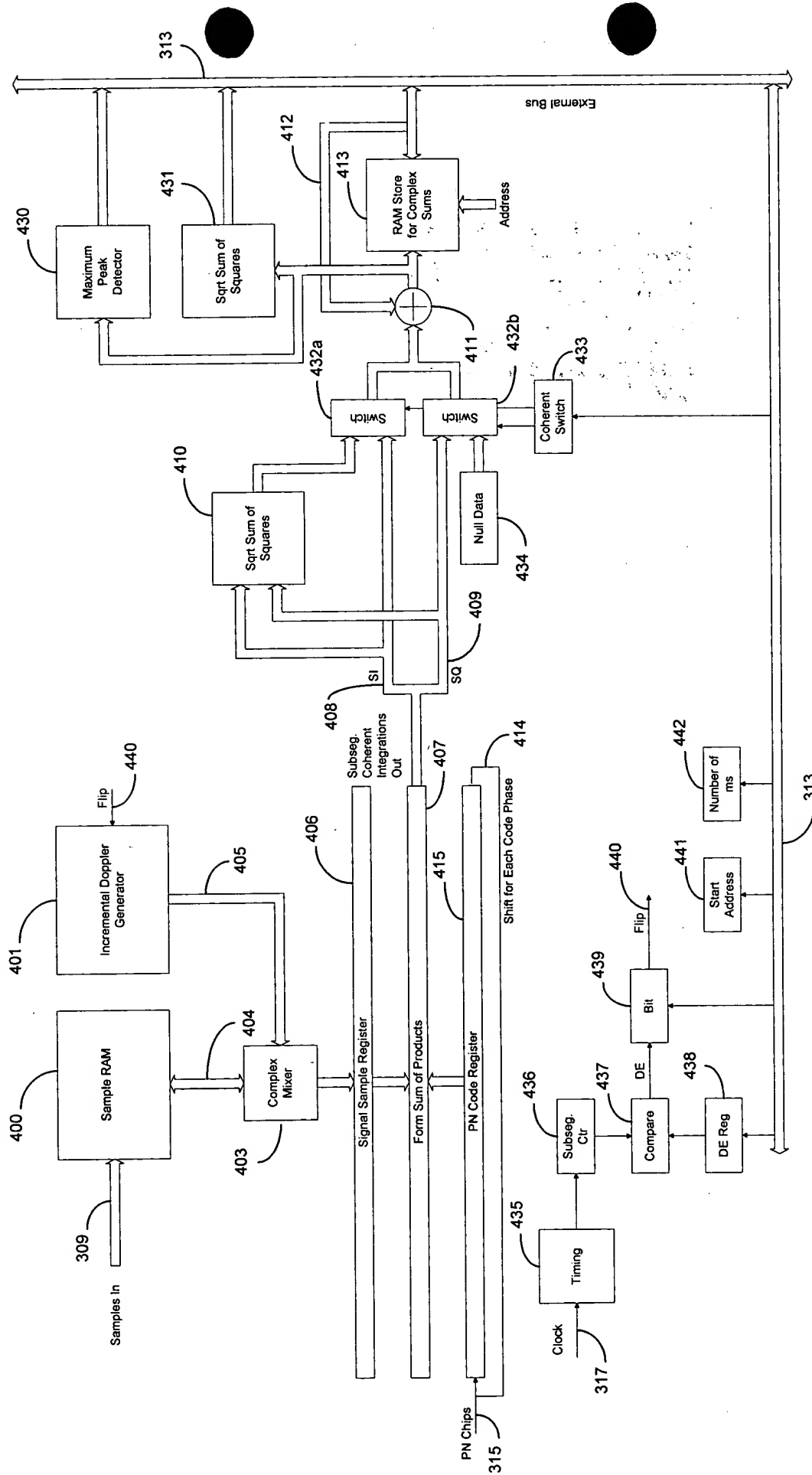


FIGURE 9

660000-020000

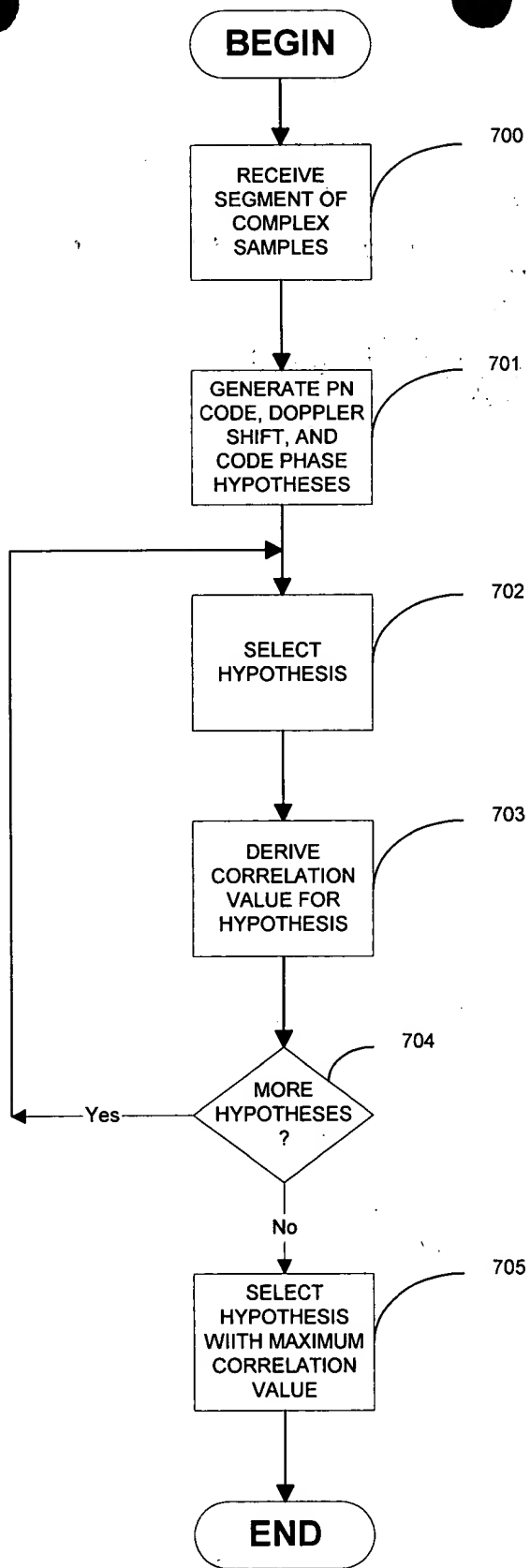
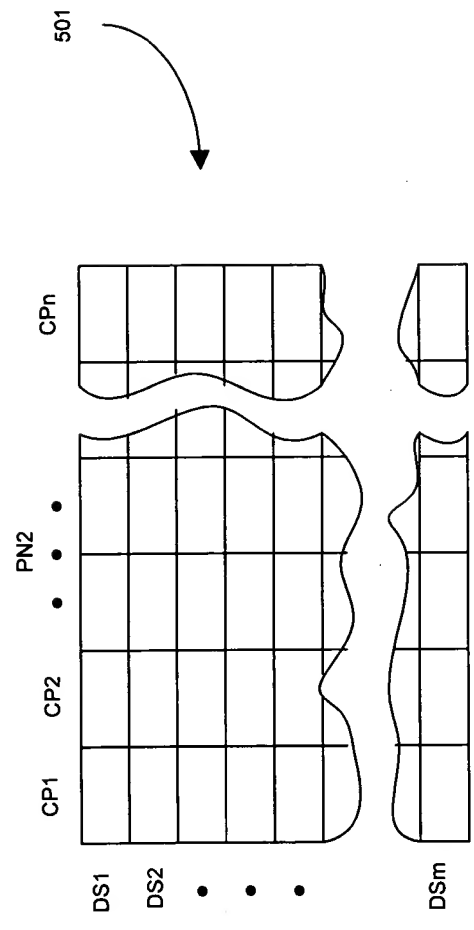
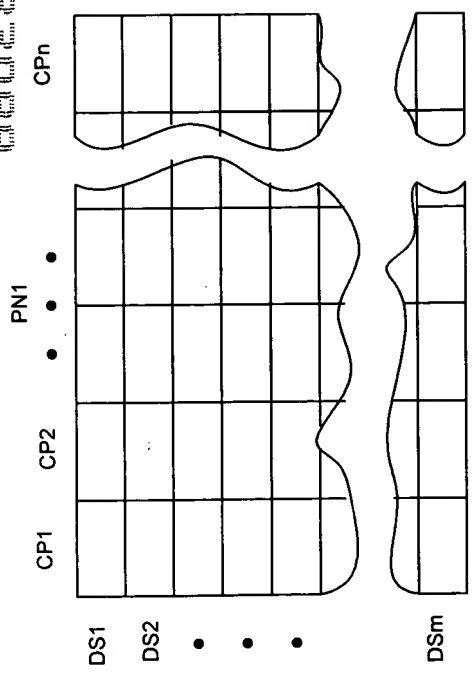


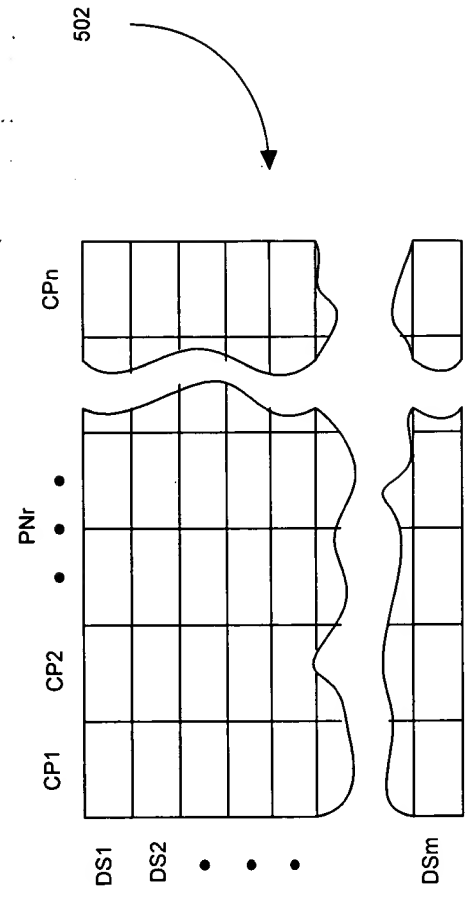
FIGURE 10

FIG. 11 is a schematic diagram of a system 500.

500



501



502

FIGURE 11

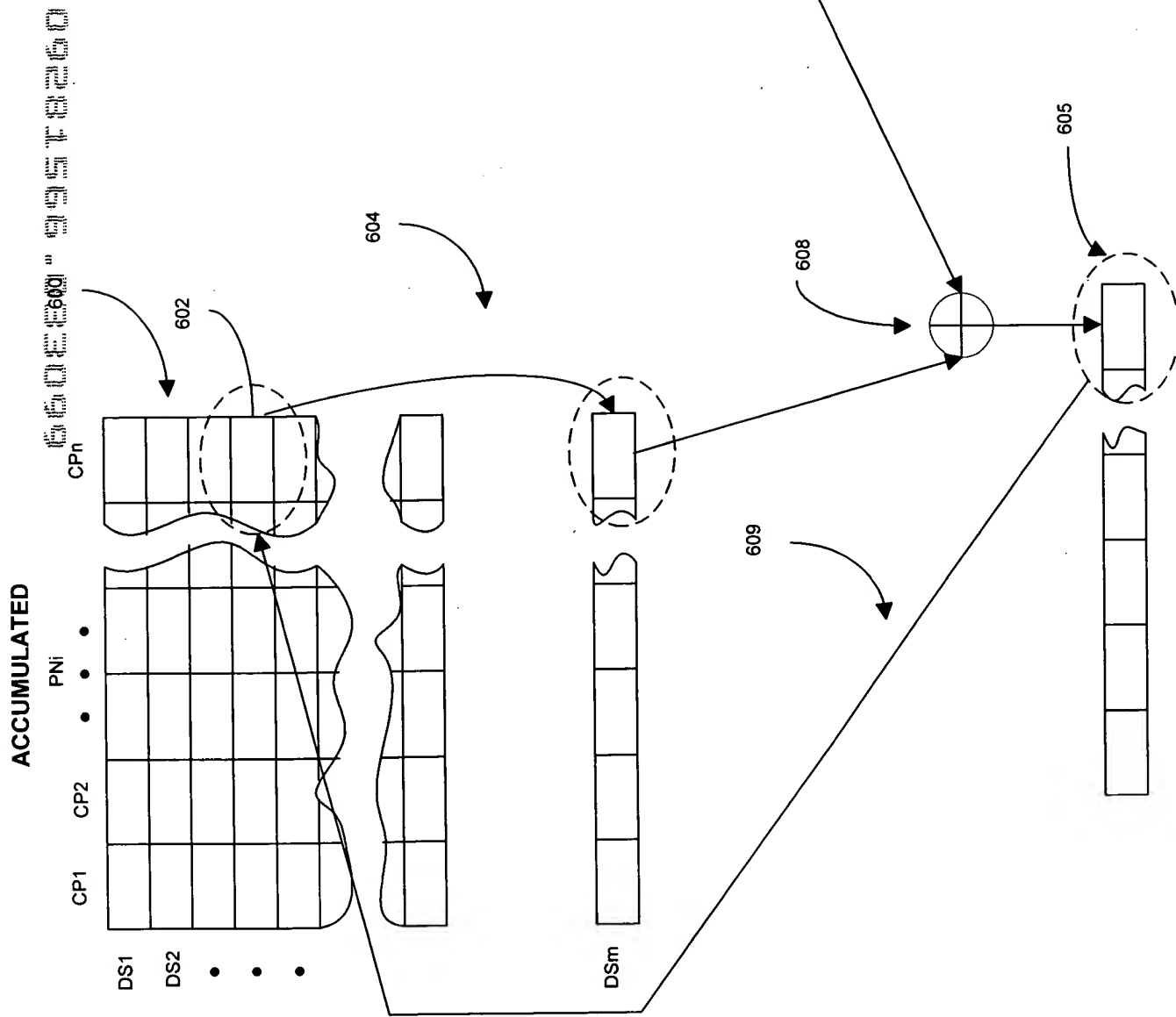
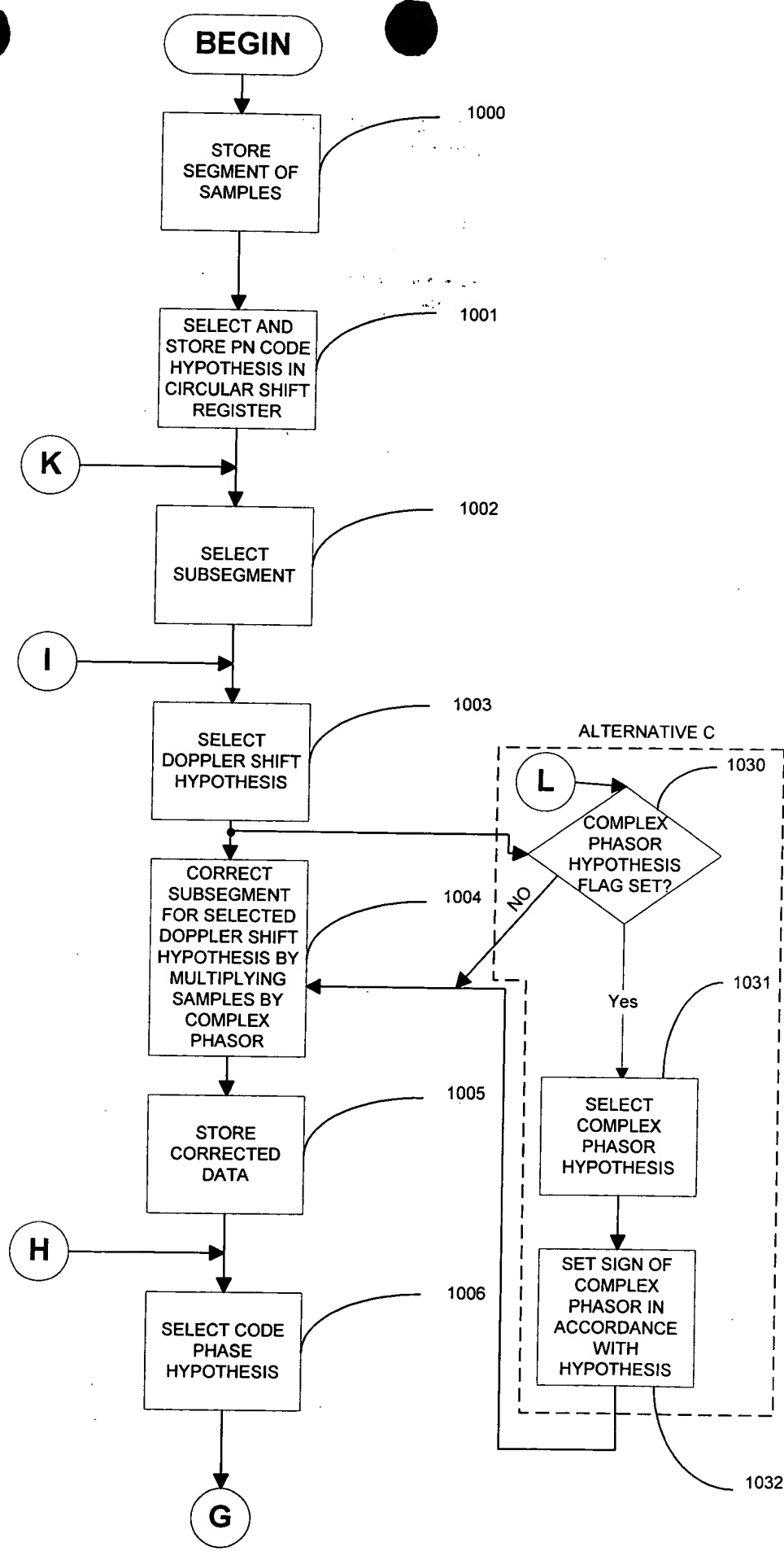


FIGURE 12

**FIGURE 13A**



G

CIRCULARLY  
SHIFT PN CODE  
REGISTER BY  
SHIFT VALUE  
DERIVED FROM  
SELECTED CODE  
PHASE  
HYPOTHESIS

1007

FORM I AND Q  
COMPONENT  
SUM OF  
PRODUCTS, SI  
AND SQ

1008

ADD TO ANY  
RESULTS  
INVOLVING  
SAME  
HYPOTHESES  
FOR PREVIOUS  
SUBSEGMENTS  
AND STORE

1009

ALTERNATIVE C

SET COMPLEX  
PHASOR  
HYPOTHESIS  
FLAG

1020

REPLICATE  
RUNNING  
TOTALS FOR  
EACH PHASOR  
HYPOTHESIS

1033

ALTERNATIVE A

PHASE FLIP?

1014

Yes

No

FLIP SIGN OF  
COMPLEX  
PHASOR

Yes

No

ALTERNATIVE C

COMPLEX PHASOR  
HYPOTHESIS FLAG  
SET?

1034

YES

NO

ANY FURTHER  
PHASE  
HYPOTHESES?

1035

YES

NO

L

FRAME  
BOUNDARY?

1010

Yes

No

ANY FURTHER  
CODE PHASE  
HYPOTHESES?

Yes

No

H

ALTERNATIVE B

SAVE SQRT. OF  
SUM OF  
SQUARES FOR  
HYPOTHESIS IN  
TEMP. STORAGE  
LOCATION FOR  
HYPOTHESIS

1016

ZERO OUT  
RUNNING SUMS  
FOR  
HYPOTHESIS

1017

ANY FURTHER  
DOPPLER SHIFT  
HYPOTHESES?

1012

Yes

No

I

J

FIGURE 13B

|     |
|-----|
| 13A |
| 13B |
| 13C |

092156-03099

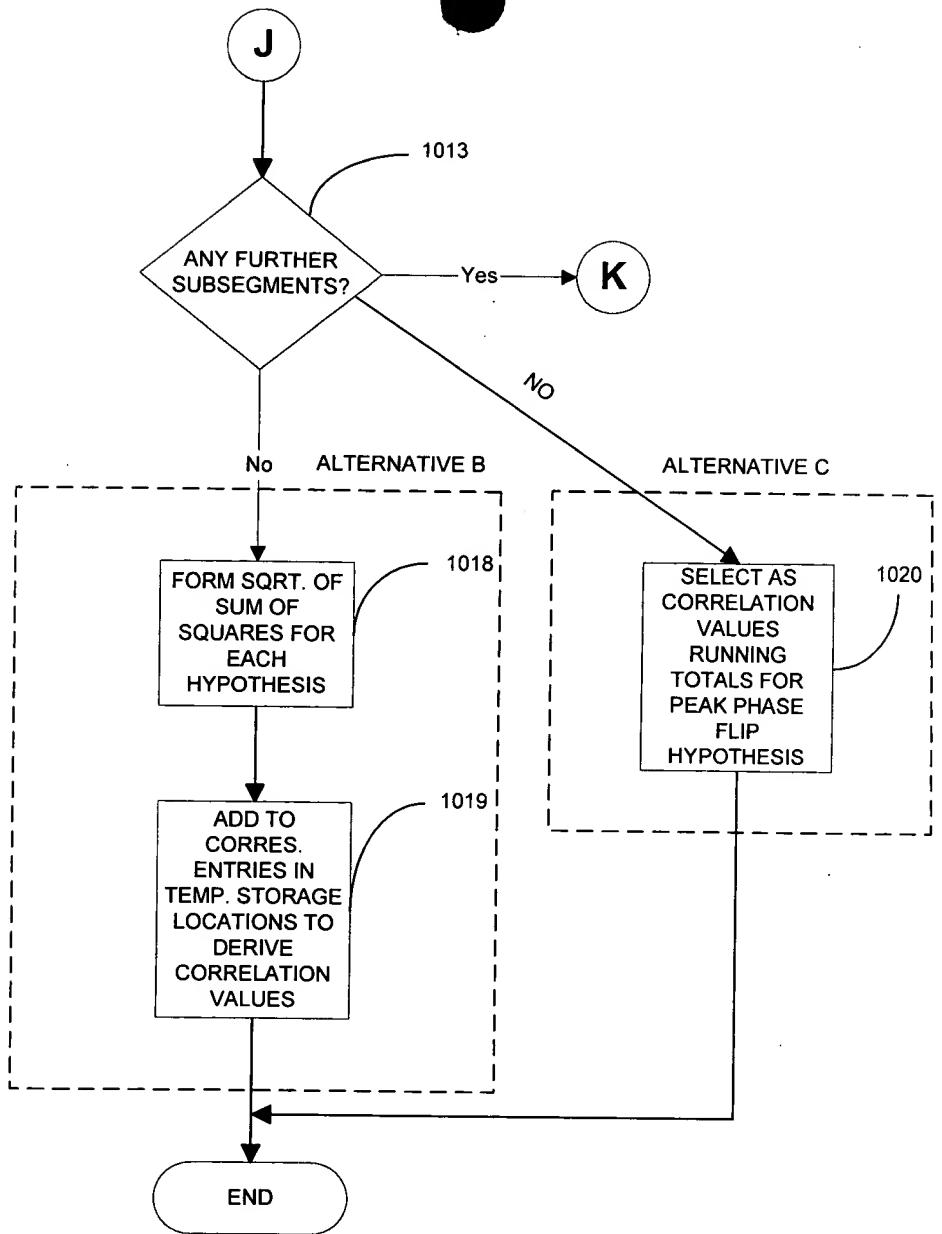


FIGURE 13C

|     |
|-----|
| 13A |
| 13B |
| 13C |